## DC-8 10/25/16 - 10/26/16

Aircraft: DC-8 - AFRC (See full schedule)

Flight Number: 1146

Payload Configuration: OIB-ATM NAV/ATM GPS/ATM-T5/T6/ATM FLIR/ATM CAMBOT MCoRDS/SNOW/Ku RADAR DMS/POS-AV GI

Nav Data Collected: Yes Total Flight Time: 11.3 hours

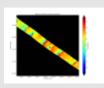
**Submitted by:** Chris Jennison on 10/27/16

Flight Segments:

From:	SCCI	То:	SCCI	
Start:	10/25/16 12:49 Z	Finish:	10/26/16 00:05 Z	
Flight Time:	11.3 hours			
Log Number:	<u>178010</u>	PI:	Nathan Kurtz	
Funding Source:	Bruce Tagg - NASA - SMD - ESD Airborne Science Program			
Purpose of Flight:	Science			
Comments:	Foundation Support 5 is another ice stream above the Ronne Ice Shelf. Clear skies and great conditions meant another routine data collection flight.			

#### Images:

### ATM T5 data



#### Read more

Flight Hour Summary:

	178010
Flight Hours Approved in SOFRS	300
Total Used	306.9
Total Remaining	-6.9

178010 Flight Reports						
Date	Flt #	Purpose of Flight	Duration	Running Total	Hours Remaining	Miles Flown
10/04/16	1135	Science	4	4	296	
10/05/16	1136	Science	2.7	6.7	293.3	
10/12/16	1138	Transit	10.9	17.6	282.4	
10/12/16	1139	Transit	3	20.6	279.4	
<u>10/14/16 -</u> <u>10/15/16</u>	1140	Science	10.9	31.5	268.5	
<u>10/15/16 -</u> <u>10/16/16</u>	1141	Science	11.8	43.3	256.7	
<u>10/17/16 -</u> <u>10/18/16</u>	1142	Science	11.8	55.1	244.9	
<u>10/20/16 -</u> <u>10/21/16</u>	1143	Science	11.4	66.5	233.5	
10/22/16	1144	Science	11	77.5	222.5	
<u>10/24/16 -</u> <u>10/25/16</u>	1145	Science	11.5	89	211	
10/25/16 - 10/26/16	1146	Science	11.3	100.3	199.7	

<u>10/26/16 -</u> <u>10/27/16</u>	1147	Science	12.1	112.4	187.6
<u>10/27/16 -</u> <u>10/28/16</u>	1148	Science	11.5	123.9	176.1
10/28/16 - 10/29/16	1149	Science	11	134.9	165.1
<u>10/31/16 -</u> <u>11/01/16</u>	1150	Science	11	145.9	154.1
<u>11/02/16 -</u> <u>11/03/16</u>	1151	Science	11.2	157.1	142.9
<u>11/03/16 -</u> <u>11/04/16</u>	1152	Science	11.5	168.6	131.4
11/04/16 - 11/05/16	1153	Science	11.1	179.7	120.3
<u>11/05/16 -</u> <u>11/06/16</u>	1154	Science	11.7	191.4	108.6
<u>11/07/16 -</u> <u>11/08/16</u>	1155	Science	11.2	202.6	97.4
<u>11/09/16 -</u> <u>11/10/16</u>	1156	Science	11.7	214.3	85.7
<u>11/10/16</u>	1157	Science	10.9	225.2	74.8
<u>11/11/16 -</u> <u>11/12/16</u>	1158	Science	11.3	236.5	63.5
<u>11/12/16 -</u> <u>11/13/16</u>	1159	Science	11.1	247.6	52.4
11/14/16	1160	Science	10.9	258.5	41.5
<u>11/15/16 -</u> <u>11/16/16</u>	1161	Science	11.6	270.1	29.9
<u>11/17/16 -</u> <u>11/18/16</u>	1162	Science	11.1	281.2	18.8
<u>11/18/16 -</u> <u>11/19/16</u>	1163	Science	11.1	292.3	7.7
11/21/16	1165	Transit	11.6	303.9	-3.9
11/21/16	1164	Transit	3	306.9	-6.9

Flight Reports began being entered into this system as of 2012 flights. If there were flights flown under an earlier log number the flight reports are not available online.

#### **Related Science Report:**

# OIB - DC-8 10/25/16 Science Report

Mission: OIB
Mission Summary:

OIB flew the high priority Foundation-Support Force 5 mission, this was the highest priority flight which was forecast to have clear conditions for the day. This flight is a new design, one of a suite of four flights designed to sample the bedrock, sub-ice shelf bathymetry and surface topography of the Foundation and Support Force ice streams on a 20-40 km grid. This particular flight is the most downstream of the four missions, and it extends coverage well into the Ronne and Filchner ice shelves on a broader 40 km grid.

All instruments performed well during the flight and no data was lost due to clouds. The MCoRDS system performed well over the flat terrain and obtained strong returns from the bed and water, a multiple from the subsurface return was even seen in the data due to the strength of the echo. The ATM Applanix system had no major issues this flight, a spare unit was newly installed today and will be tested to determine the future viability as a backup system.

The MiniRad piggyback instrument was also flown on this mission and looked to have successfully collected about 1.5 Gb of data, a preliminary look at data from the previous flight looked to show successful collection of

all 8 channels.

Data volumes
ATM: T5: 18 Gb T6: 20 Gb
FLIR: 7.5 Gb
Cambot: 8.5 Gb
DMS: 48 Gb
Snow/Ku radars: 340 Gb each
MCoRDS: 950 Gb
AIRGrav: 5 Gb
data on: 1638
data off: 2003

File:

If light\_map\_recovery.pdf
Submitted by: Nathan T. Kurtz on 10/25/16

Page Last Updated: April 22, 2017

Page Editor: Brad Bulger

NASA Official: Bruce A. Tagg

 $\textbf{Source URL:} \ https://airbornescience.nasa.gov/flight\_reports/DC-8\_10\_25\_16\_-\_10\_26\_16\# comment-0$